

Application No.: 10/737,011

Docket No.: JCLA11474

REMARKS**Present Status of Application**

Claims 1-11 remain pending in the application. The Office Action mailed April 06, 2005, rejected claims 1-11 under U.S.C. 102(a) as being anticipated by Chang et al. (US Publication No. 2003/0042566 A1). Claims 1-11 were rejected under U.S.C. 103(a) as being unpatentable over Liu et al. (US Patent No. 6,429,536) in view of Chang et al. and Hammand et al. (US Patent No. 6,739,047).

Claims 4-5 and 9-11 have been cancelled. Applicant believes that these changes do not introduce new matter and reconsideration of those claims is respectfully requested. In view of the above amendments and the following discussions, a notice of allowance is respectfully solicited.

Discussion for 35 U.S.C. 102 and 103 rejections

Claims 1-11 were rejected under U.S.C. 102(a) as being anticipated by Chang et al. (US Publication No. 2003/0042566 A1). Claims 1-11 were rejected under U.S.C. 103(a) as being unpatentable over Liu et al. (US Patent No. 6,429,536) in view of Chang et al. and Hammand et al. (US Patent No. 6,739,047).

Claims 4-5 and 9-11 have been cancelled.

Applicant respectfully asserts that the structure of claim 1 and 6 is patentably distinct from the prior art reference. Especially, the structure comprises "a carrier having

Application No.: 10/737,011

Docket No.: JCLA11474

a surface with a power contact, a ground contact and a signal contact thereon, wherein the surface also has a chip bonding area, the power contact is located close to the chip bonding area, the ground contact is connected to the chip bonding area, but the signal contact is positioned further away from the chip bonding area” or “a carrier having a surface with a power ring, a ground ring and a plurality of signal contacts thereon, wherein the surface also has a chip bonding area, the power ring is located around the chip bonding area, the ground ring is connected to the chip bonding area, the signal contacts are positioned further away from the chip bonding area, the power ring has a plurality of power contacts, the ground ring has a plurality of ground contacts”. Furthermore, the structure comprises at least “a second conductive wire with the two ends connected to one of the bonding pads of the chip and one of the signal contacts such that the second conductive wire crosses over the passive component without contacting the passive component”.

Chang discloses a layout structure for providing stable power supply to a four-layer motherboard and a main bridge chip substrate.

The Office Action considered at least Chang’s substrate 602, die 604, bonding wires 606 being respectively comparable to the carrier, the chip and the first/second wires of this invention.

Applicant respectfully disagrees with this interpretation.

As shown in Chang’s Fig. 6, die 604 mounted on the substrate 602 connects to the

Application No.: 10/737,011

Docket No.: JCLA11474

bonding pads 608 through the bonding wires 606 (paragraph [0026]). Obviously, Chang's bonding pads 608 are located on the substrate 602. In fact, Chang's die is clearly different from the chip of this invention because no bonding pads are taught or suggested to be included on Chang's die. Hence, Chang fails to disclose "first conductive wires with the two ends of each conductive wire connected to one of the bonding pads of the chip and one of the power contacts or one of the ground contacts" or "at least a second conductive wire with the two ends connected to one of the bonding pads of the chip and one of the signal contacts", as recited in claims 1 and 6. Moreover, nothing is mentioned in Chang's teachings regarding the "chip bonding area" as stated in this invention.

Accordingly, Chang fails to teach or disclose all limitations as recited in the amended independent claim 1 or 6. Claims depending from claims 1 and 6 therefore are not anticipated by the reference Chang for the reasons noted above, as well as for the additional features recited therein. Therefore, reconsideration and withdrawal of these 102 rejections are respectfully requested.

The Office Action considered that Liu substantially disclosed this invention except that the ground contact connected to the chip bonding region. The Office Action relied on Hammond for teaching the lacking feature.

Regarding the rejection under 35 USC 103(a), the Applicants remark that the relied reference of Chang et al. ((US Publication No. 2003/0042566 A1) and the present application were, at the time the invention was made, commonly owned by Via

Application No.: 10/737,011

Docket No.: JCLA11474

Technologies, Inc.. Pursuant to 35 USC 103(c), Chang et al. is therefore an improper prior art reference for rejection under 35 USC 103.

Applicants believe that the above statement alone is sufficient evidence to disqualify US Publication No. 2003/0042566A1 (Chang et al.) from being used in a rejection under 35 U.S.C. 103(a) against the claims of Application 10/737,011.

Liu merely discloses bonding wires 140/180 connecting between one of the bonding pads of the chip and the power ring 106, and as recognized by the Office Action, "the wires connected to the signal contacts are not shown.....". Even considering the general teachings of Liu "a plurality of other bonding wires electrically connecting the bonding pads of the chip to the power ring 104, the ground ring 106 and corresponding conductive traces 108" (as recited in Liu's col. 4, lines 43-47), Liu still fails to disclose the second conductive wires as recited in the present invention. Liu simply mentions possible electrical connection between the bonding pads of the chip to the conductive traces 108 that are not equivalent to the signal contacts.

On the contrary, the second conductive wires of the present invention having two ends connected to one of the bonding pads of the chip and one of the signal contacts such that the second conductive wire crosses over the passive component without contacting the passive component. Consequently, spatial utilization of the carrier is increased.

Accordingly, the structure of the present invention is patentably distinct from the prior art reference because Liu fails to disclose all limitations of claim 1 or 6. However,

Application No.: 10/737,011

Docket No.: JCLA11474

the reference Hammond is unable to remedy the deficiencies of the reference Liu. Therefore, it is respectfully submitted that claims 1-3 and 6-8 patentably distinguish over the cited references, either alone or in combination, for at least the reasons stated above as well as for the additional features that these claims recite.

Withdrawal of these rejections under 35 USC 103(a) is respectfully requested.

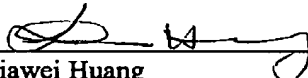
CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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